

WHAT IS CLAIMED IS:

WE CLAIM:

Sub. A1 1. Fuel pressure pulse damper comprising a metallic damper body defining a chamber in which a flexible diaphragm is received in a manner to dampen fuel pressure pulses between a fuel pump and fuel injectors of a vehicle fuel system, said damper body including a first fitting for receiving pressurized fuel and a second quick connect fitting for connection to a fuel rail for supplying pressurized fuel to fuel injectors of the vehicle engine.

2. The damper of claim 1 wherein said damper body includes first and second metallic housings that mate together to define the chamber and to trap a peripheral edge of the flexible diaphragm such that the diaphragm divides the chamber into a first chamber that communicates to pressurized fuel entering the first fitting and leaving the quick connect fitting, said diaphragm flexing in a manner to attenuate fuel pressure pulses in the fuel system.

3. The damper of claim 2 wherein the lower housing is metallurgically fastened to a metallic quick connect fitting.

4. The damper of claim 1 wherein the quick connect fitting is preformed as a separate component and fastened metallurgically to the damper body.

Sub. A2 5. The damper of claim 1 wherein the quick connect fitting is formed integrally with the metallic damper body.

6. The damper of claim 1 wherein the barbed fitting is a preformed as a separate metallic component and fastened metallurgically to the damper body.

7. The damper of claim 1 wherein the barbed fitting is formed integrally with the metallic damper body.

8. The damper of claim 1 wherein the gas-filled chamber is filled with an inert gas.

9. The damper of claim 8 wherein the gas-filled chamber includes superambient gas.

10. The damper of claim 8 wherein the gas-filled chamber includes ambient air.

11. The damper of claim 1 wherein the gas-filled chamber communicates to a charge port metallurgically sealed after the gas-filled chamber is charged.

12. A method of making a fuel pressure pulse damper, comprising assembling a flexible diaphragm in a damper body in a gas pressurized enclosure having superambient gas therein in a manner to trap said superambient gas between the diaphragm and the damper body.

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